REPORT DOCUMENTATION PAGE

Form Approved
OMB No. 0704-0188

1. REPORT DATE *(DD-MM-YYYY)*	2. REPORT TYPE	3. DATES COVERED *(From - To)*
17-03-2009	Final Report	Jul 2008-Mar 2009

4. TITLE AND SUBTITLE
Restructuring of the Coast Guard Pacific Area Mental Health Program

5a. CONTRACT NUMBER

5b. GRANT NUMBER

5c. PROGRAM ELEMENT NUMBER

6. AUTHOR(S)
Speer, Daniel, S, CWO, USCG

5d. PROJECT NUMBER

5e. TASK NUMBER

5f. WORK UNIT NUMBER

7. PERFORMING ORGANIZATION NAME(S) AND ADDRESS(ES)

TRICARE Regional Office
7800 IH-10 West, Suite 400
San Antonio, TX 78230-4761

8. PERFORMING ORGANIZATION REPORT NUMBER

9. SPONSORING / MONITORING AGENCY NAME(S) AND ADDRESS(ES)
US Army Medical Department Center and School
BLDG 2841 MCCS-HFB (Army-Baylor Program in Health and Business Administration)
3151 Scott Road, Suite 1411
Fort Sam Houston, TX 78234-6135

10. SPONSOR/MONITOR'S ACRONYM(S)

11. SPONSOR/MONITOR'S REPORT NUMBER(S)
35-09

12. DISTRIBUTION / AVAILABILITY STATEMENT

Approved for public release; distribution is unlimited

13. SUPPLEMENTARY NOTES

20100329221

14. ABSTRACT

Between FY2005 and FY2007 the Coast Guard Pacific Area Command has spent in excess of $4.5 million on mental health purchased and direct care (M2, 2008). This report demonstrates how the Pacific Area Command can decrease the cost of mental health services while simultaneously improving access and quality of those services with the development of a Coast Guard mental health network. A projected average annual cost savings of $1.4 million over a five year period can be realized, in addition to the soft benefits of: (a) improved coordination of mental health resources, (b) enhanced feedback to line Commanders, (c) streamlined mental health medical board process, (d) improved case management, (e) pre and post deployment briefs to operational commands, and (f) education and training of Coast Guard personnel to remove the stigma associated with mental health illnesses.

15. SUBJECT TERMS
Coast Guard mental/behavioral health; DoD/MHS mental/behavioral health; Restructuring of mental health program; Business Case Analysis Mental Health Program

16. SECURITY CLASSIFICATION OF:			17. LIMITATION OF ABSTRACT	18. NUMBER OF PAGES	19a. NAME OF RESPONSIBLE PERSON
a. REPORT	b. ABSTRACT	c. THIS PAGE			Education Technician
U	U	U	UU	53	19b. TELEPHONE NUMBER *(include area code)* (210) 221-6443

Graduate Management Project:

Business Case Analysis:
Restructuring of Coast Guard Pacific Area Mental Health Program

Presented to MAJ Bradley M. Beauvais, PhD

In partial fulfillment of the requirements for
HCA 5661 - Administrative Residency

By

CWO2 Daniel S. Speer, USCG

Ft Sam Houston, TX
10 March 2009

Table of Contents

List of Figures

List of Tables

Disclaimer

It should be noted the views expressed in this report are those of the author and do not reflect the official policy or position of Baylor University, the U.S. Coast Guard, the Department of Homeland Security, or the U.S. Government. This report provides approximations of important financial consequences that should be considered in decisions involving the feasibility of restructuring the mental health program within the Coast Guard Pacific Area. The analysis is based on information provided by the Coast Guard Maintenance & Logistics Command Pacific (MLCPAC) Health & Safety Division, interviews with operational Commanders and clinic administrators throughout the Pacific Area, and research conducted via the Military Health System Management Analysis and Reporting Tool (M2). It is recommended this analysis is used only as an aid in developing future cost and benefit analysis.

Acknowledgments

I would like to thank those who helped and supported me with this project. First and foremost, my preceptor, Ms. Martha Lupo for her outstanding support and direction throughout my residency and Ms. Jean Dominguez whose mentorship and guidance, over the last four years, has significantly impacted my development as a healthcare administrator. Thanks to LCDR Kelly Coughlin, MAJ Bradley Beauvais, and LT Suzanne Wood for providing opportunities for discussion and growth on this topic.

I would also like to thank the Pacific Area clinic administrators and Maintenance & Logistics Command Health and Safety Division staff, as well as the Coast Guard Physical Evaluation Branch. This research is conducted in hopes that the findings assist them in their pursuit of quality health care delivery.

Finally, I would like to thank CAPT Craig Lloyd, Commanding Officer CGC MUNRO; CDR Carrie Ash, Executive Officer CGC MORGENTHAU; CDR William Cameron, Deputy Group Commander/Executive Officer Coast Guard Group/Air Station Astoria; LCDR David Neel and LCDR Douglas Watson, pilots of CG6020 HH-60J; and LCDR Robert A. Church, Chaplain Coast Guard Training Center Petaluma, CA for their willingness to share their experiences.

Executive Summary

According to the United States Government Accountability Office (GAO), the annual budget for the Military Health System (MHS) approached $35.4 billion in fiscal year (FY) 2005. By FY2015, health care spending is projected to exceed 12% of the Department of Defense's (DoD) annual budget (GAO, 2007). The escalation of health care expenses underscores the importance of effective manpower utilization as well as cost control within the Military Health System.

Between FY2005 and FY2007 the Coast Guard Pacific Area Command has spent in excess of $4.5 million on mental health purchased and direct care (M2, 2008). This report demonstrates how the Pacific Area Command can decrease the cost of mental health services while simultaneously improving access and quality of those services with the development of a Coast Guard mental health network. A projected average annual cost savings of $1.4 million over a five year period can be realized, in addition to the soft benefits of: (a) improved coordination of mental health resources, (b) enhanced feedback to line Commanders, (c) streamlined mental health medical board process, (d) improved case management, (e) pre and post deployment briefs to operational commands, and (f) education and training of Coast Guard personnel to remove the stigma associated with mental health illnesses.

Introduction

Background

As the smallest branch of the five military services, the Coast Guard (CG) performs a variety of roles in defense of our nation. Its core roles are to protect the public, the environment, and U.S. economic and security interests in any maritime region in which those interests may be at risk, including international waters and America's coasts, ports, and inland waterways (U.S. Coast Guard Missions webpage, 2008). The Coast Guard accomplishes these missions with a complement of approximately 40,150 active duty and 8,000 reserve members (DHS, 2007). With such a large operating area, diverse missions, and a relatively small force, Coast Guard members can, at times, find themselves under considerable stress, leading to mental and/or behavioral health illnesses.

The Coast Guard operates 42 health care clinics throughout the United States and Puerto Rico. For this business case analysis (BCA), research will be limited to the 15 clinics located in the four Pacific Area Districts (see Figure 1), totaling approximately 27,000 active duty, reserve and civilian members (U.S. Coast Guard Pacific Area overview webpage, 2008). These 15 Coast Guard clinics in the Pacific Area offer primary care for active duty and reserve members only, with space available access for family members and retirees. The majority

of specialty care, to include mental health, is referred out to Department of Defense (DoD) military treatment facilities (MTF) or the TRICARE Network (Coughlin, 2007).

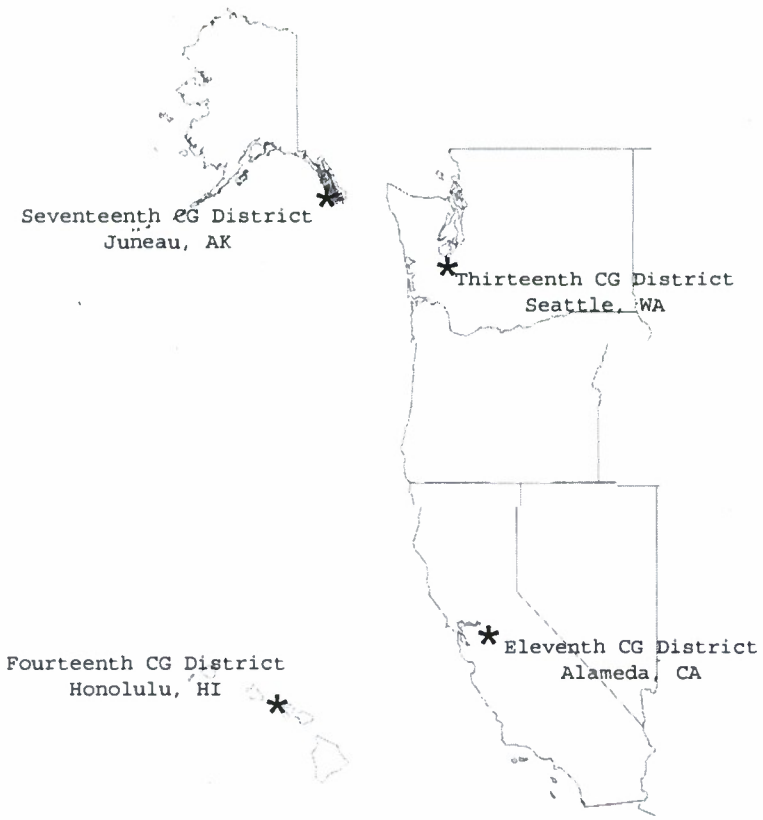

Figure 1. Coast Guard Pacific Area Districts

Coast Guard Health Services Mission

The mission of the Coast Guard Health Services Program is to ensure the medical and dental readiness of all Coast Guard members to maintain ability for world-wide deployment, to provide health care to active duty and reserve members in support of Coast Guard missions, and to ensure the availability of quality, cost effective health care for all eligible

beneficiaries (U.S. Coast Guard MLCPAC Health & Safety webpage, 2008).

Coast Guard Health Services Vision

> The primary responsibility of the Health and Safety Program is the provision of those services necessary to assure member fitness for unrestricted worldwide duty in support of Coast Guard missions and provide commanding officers with the capability to assess unit personnel and material readiness (U.S. Coast Guard MLCPAC Health & Safety webpage, 2008).

Subject of the Case

Mental health services for Coast Guard members throughout the Pacific Area are primarily provided by DoD and TRICARE Network providers. For those Coast Guard units located within close proximity of a DoD military treatment facility (MTF) obtaining mental health services is readily accessible with a defined referral process. For example, San Diego Coast Guard units utilize Balboa Naval Medical Center, Hawaii Coast Guard units utilize Tripler Army Medical Center, and Guam Coast Guard units utilize Naval Hospital Guam. Those Coast Guard units located outside the catchment area of a DoD military treatment facility rely solely on the TRICARE Network in their area. In interviews conducted with managed care officers and clinic administrators in these areas there was a consensus that mental

health services were adequate and meeting the needs of Coast Guard members. On occasion there will be issues regarding access and quality which are quickly resolved. This research will concentrate on those regions in the Pacific Area where DoD and TRICARE Network mental health support services are not as robust, specifically: Alameda, CA; Petaluma, CA; and Kodiak, AK.

Additionally, obtaining mental health services has resulted in rising costs. Costs are defined as purchased and direct care costs and indirect costs which include man-hours lost. Between FY2005-2007 the Pacific Area Command spent $4.5 million in purchased and direct care for mental health services. Compared to the total cost of $43.2 million for all purchased and direct care in the Pacific Area, mental health services accounted for approximately 10% of those health care costs (M2, 2008) (see Figure 2).

The cost of health care, people's ability to obtain health care when needed, and the quality of services are interactively related (Shi & Singh 2004). This report will consider the "iron triangle" of health care: access, quality, and cost as it applies to the Coast Guard Pacific Area mental health program.

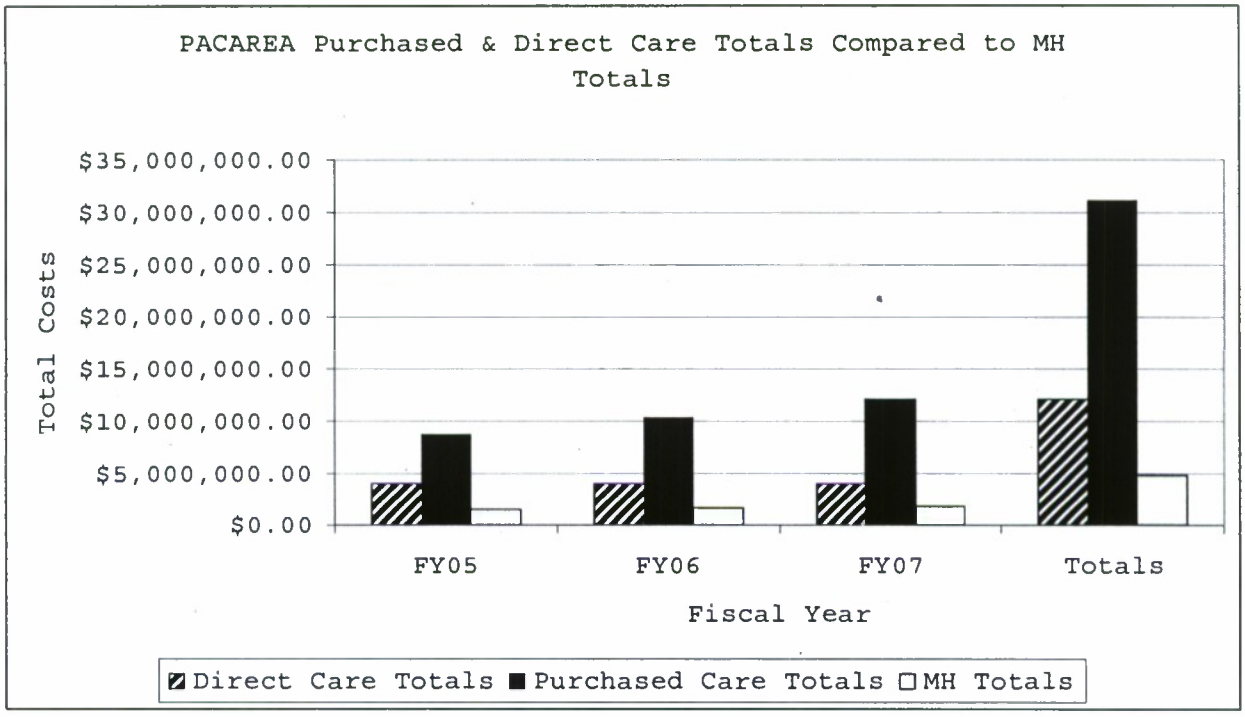

Figure 2. FY05-07 Purchased/Direct Care Compared to MH Care.

Access

Access is the ability of an individual to obtain health care services when needed (Shi & Singh 2004). With regard to access and Coast Guard mental health services in the Pacific Area there are four areas of concern: (a) establishment of new access standards for mental health appointments; (b) the decision process confronting Coast Guard members; (c) travel to mental health providers; and (d) Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF).

The previous access standards for mental health appointments established by the TRICARE Management Activity (TMA) (acute care 24 hours, routine care 7 days and specialty care 28 days) were, for the most part, being met in the Pacific

Area (Ms. J.A. Dominguez, Chief Health & Safety Pacific Area, personal communication, September 17, 2008). However, based on the perception of the DoD Task Force on mental health that access standards for mental health are not being observed or enforced, new TRICARE Prime access standards for mental health care have been established. For any new behavioral health condition or exacerbation of a previously diagnosed condition for which intervention is required, but is not urgent, mental/behavioral health care will be provided within one week. (DoD Health Affairs, memorandum from the Assistant Secretary of Defense, Dr. S. Ward Casscells October 9, 2007).

With the establishment of the new mental health access standards some Coast Guard Pacific Area clinics may struggle to meet these requirements. For example, Integrated Support Command (ISC) Kodiak, AK is the Coast Guard's largest and most remote base with unique mental health situations including Seasonal Affective Disorder as well as a high number of geographic service members with depression, anxiety, and other environmentally compounded issues (CAPT C.B. Lloyd, Commanding Officer USCGC MUNRO, personal communication, December 18, 2008); with only one psychiatrist in the local TRICARE Network, meeting the new seven day requirement for mental health referrals will be challenging (LT T.L. Emerson, Clinic Administrator ISC Kodiak, AK, personal communication, September 23, 2008).

The decision process a patient must face when seeking mental health services in the Coast Guard vary in scope, availability, and accountability. Initially, the patient must determine which resource would best suit their needs, they include: (a) Independent Duty Health Services Technicians (IDHS); (b) Primary Care Managers (PCM) who can refer members to a DoD military treatment facility or the TRICARE Network; (c) Employee Assistance Program (EAP) which is free, voluntary, short-term counseling and referral for various issues affecting employee mental and emotional well-being; (d) Coast Guard Work-life services which provide a variety of services from health promotion, family support, and rape/sexual assault counseling; (e) unit Chaplains; (f) Substance Abuse Prevention Specialists (SAPS), and (g) Command Drug and Alcohol Representatives (CDARS). Although these resources offer a wide variety of services and make available different treatment options, they can be somewhat perplexing for the Coast Guard member who may eventually decide not to seek care or avoid follow up on care.

Coast Guard unit locales are determined by operational need, requiring personnel to live in very rural, isolated locations. Remote locations of many Coast Guard units prohibit efficient access to a variety of medical services including mental health. Members living in these locales can spend hours and, in some instances, days obtaining the most basic mental

health evaluation and services. For instance, Coast Guard members stationed in Kodiak, AK are confronted with multiday visits in order to obtain DoD confirmation of a diagnosis from a civilian mental health provider; weather delays; and rescheduling of appointments due to flight cancellations (CAPT C.B. Lloyd, Commanding Officer USCGC MUNRO, personal communication, December 18, 2008).

This is not unique to Kodiak, AK. Often times, due to non-availability of military mental health providers in the San Francisco Bay Area, Integrated support Command (ISC) Alameda, CA resorted to long distance referral to Balboa Naval Hospital San Diego, CA which is located approximately 500 miles away. The trip by automobile is approx 7.5 hours; most patients were sent via commercial flights at significant costs to the government (LT M.E. Ortiz, Clinic Administrator ISC Alameda, personal communication, January 31, 2009).

The final issue concerning access to mental health care is the impact of Operation Iraqi Freedom (OIF) and Operation Enduring Freedom (OEF). In a recent study conducted by the Department of Defense Task force on Mental Health (June 2007) it was determined the military health system (MHS) lacks the fiscal resources and fully-trained personnel to fulfill its mission to support psychological health in peacetime or fulfill the enhanced requirements imposed during times of conflict. On a

recurrent basis, the Integrated Support Command (ISC) Alameda, CA experienced significant delays in accessing psychiatric & psychological care for active duty members. The delays were primarily due to a shortage of staff at David Grant Medical Center at Travis AFB due to multiple deployments for OIF/OEF (LT M.E. Ortiz, Clinic Administrator ISC Alameda, personal communication, January 31, 2009).

Quality

Of the three constructs that make up the "iron triangle" of health care, quality is the primary concern with regards to the Coast Guard mental health program in the Pacific Area (Ms. J.A. Dominguez, Chief Health & Safety Pacific Area, personal communication, September 17, 2008). Primary areas of concern are: (a) patient oversight in the form of case management, (b) communication among the variety of Coast Guard mental health resources, (c) feedback to Commanders on Fitness-for-Duty (FFD) issues, and (d) the Physical Disability Evaluation System (PDES) medical board process.

Case management involves the process of monitoring the health care of individuals to ensure all of their needs are being fulfilled. Case management within the Pacific Area mental health program would provide a primary point of contact for patients, DoD and TRICARE Network providers, and unit Commanders ensuring Coast Guard members needs were sufficiently being met.

Currently, the closest thing resembling mental health case management in the Pacific Area is the Primary Care Manager (PCM) and Managed Care Support Contractor (MCSC).

Communication among the variety of Coast Guard mental health resources is another concern. In an interview with Coast Guard Maintenance & Logistics Command Pacific Work-Life staff it was stated a divide in communication among the different mental health resources does exist. This is in large part due to the confidentiality restrictions and HIPAA legislation the providers must adhere to (LCDR R.A. Church, Chaplain TRACEN Petaluma, personal communication, January 26, 2009). Recommendations to improve coordination among the different resources will be discussed later in this report.

The Commanding Officer (CO) is responsible for the health and physical readiness of the crew. In the absence of a permanently attached Medical Officer the unit's Executive Officer (XO) is designated by Coast Guard Regulations as the unit's medical officer (COMDTINST M6000.1C, 2008). Timely feedback to operational Commanders regarding Fitness-For-Duty (FFD) issues and medical board status concerning subordinates is imperative. Civilian TRICARE Network mental health provider feedback to Coast Guard line Commanders will always be a hurdle to overcome. However, there also appears to be a cultural disconnect between Coast Guard line Commanders and DoD mental

health providers. One example of this phenomenon has been experienced by CDR Carrie Ash, Executive Officer (XO) of the USCGC MORGENTHAU.

Since reporting aboard CGC MORGENTHAU in April of 2008 CDR Ash has experienced a wave of mental and behavioral health issues among the crew. She has been managing fifteen separate mental and behavioral health cases to include: alleged rape/sexual assault, adjustment disorders, anger management and assault, depression, eating disorders, psychosis, self mutilation, suicide attempt, and suicidal ideation. These diagnoses are representative of a variety of rates and ranks among the crew (CDR C.M. Ash, Executive Officer USCGC MORGENTHAU, personnel communication, January 31, 2009).

CDR Ash describes the daily process of dealing with these issues as frustrating and time consuming. On several occasions, when ordering Command directed psychological evaluations, she has encountered difficulties with the local DoD military treatment facility concerning the completion of the appropriate paperwork. Members of her crew have actually been denied access because the necessary forms were not completed. Also, there were incidents were members were evaluated by mental health providers and returned to the Cutter Fit-For-Full-Duty (FFFD), it was the Commands opinion the service member was in no condition to be fit for sea duty. CDR Ash attributes this to a misunderstanding

of the Coast Guard mission and sea duty requirements by DoD mental health providers. In an article titled, Fleet Leaders' Attitudes about Subordinates' Use of Mental Health Services, it was found that: The leaders' determination of fitness for sea duty was also influenced by their perception of the reliability of mental health evaluations. Lack of clear communication with mental health providers forced leaders to make their own assessments (Westphal, 2007).

CDR Ash praises the attempt by Maintenance & Logistics Command Pacific Health and Safety Division to provide more mental health support in the Alameda area with the hiring of a contract psychiatrist and a part-time psychologist but states this is not enough. There have been instances where crew members were unable to get appointments with the Coast Guard mental health provider and when sent out into the TRICARE network appointment availability was also limited.

The following question was posed to CDR Ash: Among your peers (other Executive Officers of operational units) do you find they have similar issues concerning the mental and behavioral health services in the region?

> "I do know USCGC BOUTWELL and USCGC SHERMAN both have had very similar challenges, perhaps not to our extent. I know they have all had the same issues with regards to diagnosis for alcohol abuse/dependency at

> the ISC Alameda clinic. Some folks were being referred to Petaluma vice here in Alameda. I know I pushed for screenings in Honolulu prior to return to homeport to avoid our support structure here" (CDR C.M. Ash, Executive Officer USCGC MORGENTHAU, personal communication, January 31, 2009).

The final concern with regards to quality and Coast Guard mental health services is the Physical Disability Evaluation System (PDES) medical board process. A typical mental health medical board can take anywhere from six months to a year to completely adjudicate. The major road block: obtaining screenings from mental health providers in a timely fashion (CWO D.W. Schneider, Admin Officer Physical Evaluation Branch, personal communication, September 23, 2008). According to the Coast Guard Physical Disability Evaluation System Manual a military psychiatrist or military psychologist, along with an evaluation consult from a civilian psychiatrist, must be a Medical Evaluation Board (MEB) member when considering a member with psychological impairments (COMDTINST M1850.2D, 2006).

Throughout the medical board process the Coast Guard member may or may not be Fit-For-Full-Duty (FFFD) depending upon their job rating, unit assigned, and diagnoses. If they are Not-Fit-For-Full-Duty (NFFD) the member will be assigned duty limitations which can adversely affect unit readiness. For

instance, operational units will not get a "backfill" (replacement) for that billet until the medical board is complete (CDR C.M. Ash, Executive Officer USCGC MORGENTHAU, personnel communication, January 31, 2009). Patient morale is also a concern, in a study conducted at Womack Army Medical Center (WAMC) Fort Bragg, NC concerning a soldier's experience with medical hold, it was determined: if providers and administrators believe the evaluation process was long and drawn-out they would be less likely to expedite care and paperwork (Berry-Caban & Lynch 2008).

Following is one final example that encapsulates the concerns of access and quality of mental health services in the Pacific Area. On the night of December 8, 2004 a Coast Guard HH-60J helicopter (CG 6020) crashed into the Bering Sea while conducting rescue hoisting operations of crewmembers from the motor vessel (M/V) SELENDANG AYU. The Coast Guard air crew survived. However, all but one of the seven M/V SELENDANG AYU crewmembers being rescued at that time did not.

In an interview with the Aircraft Commander of CG 6020, LCDR David Neel, the following question was posed: Did you and your crew receive appropriate Critical Incident Stress Management (CISM) and/or Post Traumatic Stress Disorder (PTSD) counseling following the mishap?

"There was a formal command designated CISM some days later that was a disaster. I walked out of it. It became quickly apparent that the session was for the benefit of the counselors/CISM team vice the crews. One of the CISM team members started crying. That doesn't help the folks that actually experienced the event. I have never been evaluated for PTSD, nor have I received PTSD counseling." (LCDR D.R. Neel, HH-60J pilot, personal communication, January 22, 2009)

In an interview with LCDR Douglas Watson, co-pilot of CG 6020, the following question was posed: Were your mental and/or behavioral health needs met post mishap?

"I was never asked what kind of treatment I wanted. At first, the flight surgeons didn't know what to do with me and they seemed to make up my treatment as they went along. There was never a clear objective or goal. The process before me to return to the cockpit was adhoc and never explained."(LCDR D.G. Watson, HH-60J pilot, personal communication, January 21, 2009)

In an interview with CDR William Cameron, currently Deputy Group Commander/Executive Officer Coast Guard Group/Air Station Astoria, the pilot of CG 6021, a second HH-60J on scene during the rescue of M/V SELENDANG AYU he states:

> "The flight mechanic fell on hard times, i.e. alcohol incidents, marital infidelity; the rescue swimmer struggled after a few more traumatic helicopter events and did not re-enlist. I thought then as I think now we did that crew a disservice by not getting them some formal counseling before returning them to the environment that had yielded such a traumatic event." (CDR W.D. Cameron, Deputy Group Commander/XO Air Station Astoria, OR, personal communication, December 23, 2008)

Cost

Cost analysis was conducted utilizing data obtained from the Military Health System Analysis and Reporting Tool (M2). Specifically, ICD-9 codes 290-319, Mental Disorders, were identified.

There are two types of cost incurred when a Coast Guard member is referred out for a mental health evaluation, purchased care and direct care. When a Coast Guard primary care manager (PCM) refers a Coast Guard member to the TRICARE Network this is considered a purchased care cost. Between FY2005-FY2007 the Coast Guard Pacific Area Command spent in excess of $2.6 million on purchased care mental health services (M2, 2008). Analyzing the trend of purchased care costs you will see a steady increase from FY2005 and FY2007 (see Figure 3).

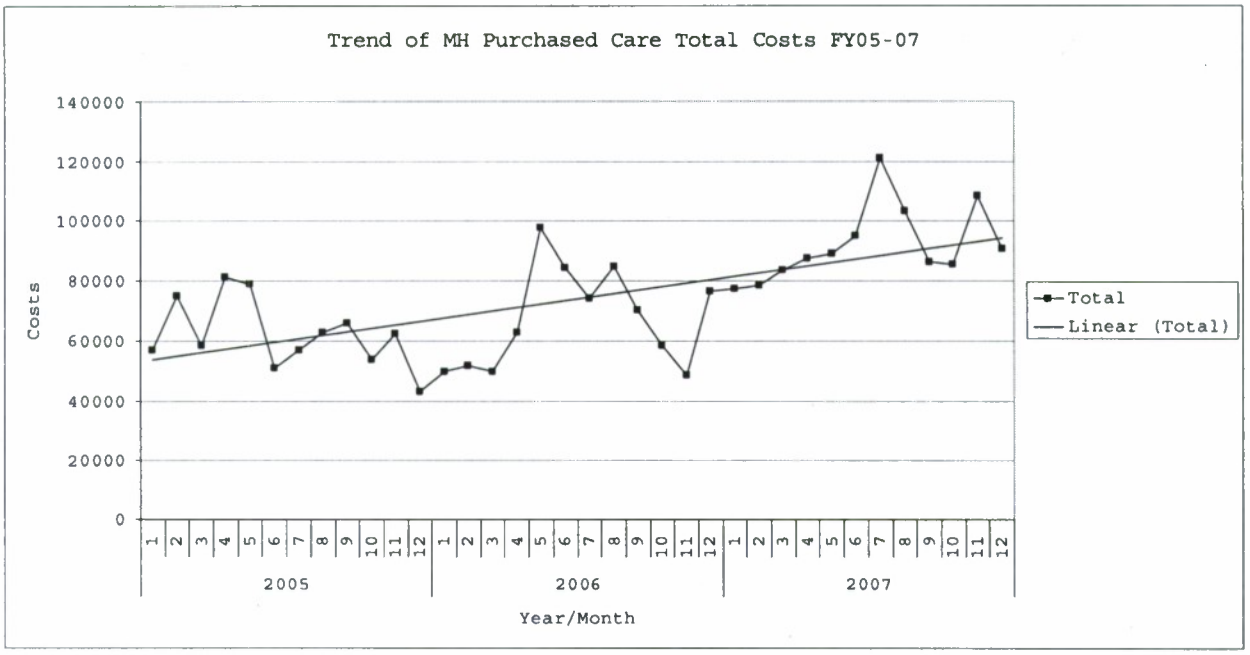

Figure 3. Trend of Purchased Care Costs FY2005-FY2007.

Direct care costs occur when a Coast Guard primary care manager (PCM) refers a Coast Guard member to a DoD facility for a mental health evaluation. According to the 1994 Federal Register, a government billing calculation factor (percentage discount) for interagency and other federal agency Sponsored Patients(IAR) rate (93.14% of full rate), will be applied to the line item charges calculated for outpatient medical and ancillary services using CMAC charges (National Archives and Records Administration , 1994). Essentially, the CG pays 93.14% (CHAMPUS Max Allowable Charge (CMAC)) of the full cost a DoD facility spends on treating Coast Guard members.

Between FY2005 and FY2007 DoD military treatment facilities (MTF) in the Pacific Area spent over $2.1 million on mental

health treatment for Coast Guard members (M2, 2008). When factoring in the CHAMPUS Max Allowable Charge (CMAC) of 93.14%, the Pacific Area Command has paid in excess of $1.9 million in mental health direct care costs. Analyzing the trend of direct care costs you will see a relative average cost of $60,000 per month DoD military treatment facilities (MTF) charge for the treatment of Coast Guard mental health referrals. When factoring in the CHAMPUS Max Allowable Charge (CMAC) of 93.14%, the Pacific Area Command reimbursed, on average, over $55,000 per month on direct care costs between FY2005 and FY2007 (see Figure 4).

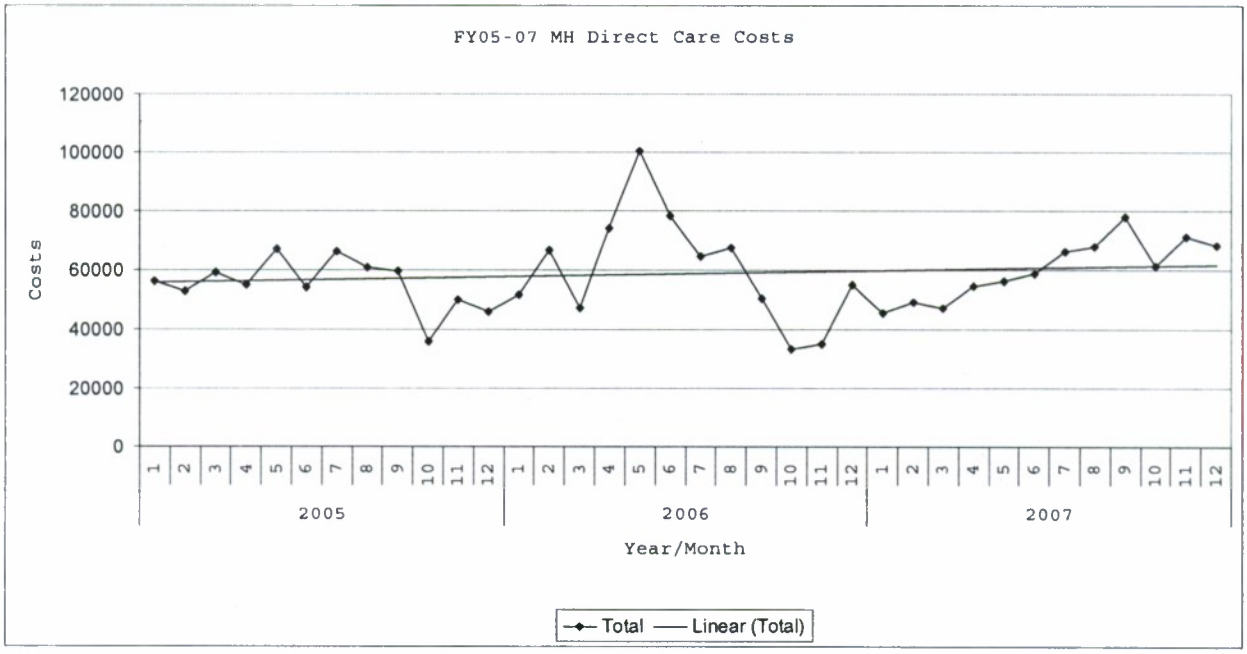

Figure 4. Trend of Direct Care costs FY2005-FY2007.

Discussed previously under the access issue was the time involved in commuting to and from mental health appointments and

the associated man-hours lost. Utilizing averages of hourly rates for officer and enlisted Coast Guard personnel (COMDTINST 7310.1L Reimbursable Standard Rates, 2008), it was estimated the average hourly rate for an active duty service member was $55.00/hour. Assuming the average appointment time is four hours, based upon the round trip commutes from Integrated Support Command (ISC) Alameda, CA and Training Center (TRACEN) Petaluma, CA to USAF David Grant Medical Center in Sacramento, CA; from Integrated Support Command (ISC) Seattle, WA to Madigan Army Medical Center Tacoma, WA; and Integrated Support Command (ISC) San Pedro, CA to Balboa Naval Medical Center San Diego, CA, it can be inferred it costs the Coast Guard Pacific Area Command $220.00, on average, in lost man-hours for a member to attend a mental health appointment.

Between FY2005 and FY2007 Coast Guard members accounted for 9919 purchased and direct care appointments in the Pacific Area (M2, 2008); multiplied by the average cost of man-hours lost ($220.00) we can infer Pacific Area Commands have conservatively lost in excess of 2.1 million dollars in lost productive man-hours due to mental health appointments. Integrated Support Command (ISC) Kodiak, AK alone has averaged $16,400 annually on mental health travel costs over the last three years, not including man-hours lost (LT T.L. Emerson, Clinic Administrator ISC Kodiak, AK, personal communication, September 23, 2008).

Despite a significant cost to Pacific Area Commands, ancillary costs, to include travel and the associated lost man-hours, will not be included in the financial analysis of this report.

Another cost that is difficult to quantify would be the discharge of a Coast Guard member due to a mental health diagnosis via the medical board process. Between FY2003 and FY2008 195 Coast Guard members have gone through the medical board process and subsequently discharged due to Post Traumatic Stress Disorder (55), Anxiety Disorder (19) and Major Depressive Disorder (131) (see Figure 5). The cost associated with these discharges due to mental health diagnoses includes; time and money spent on in-processing, training and education, and other associated costs. However, since these costs are difficult to quantify and vary greatly on a case by case basis they will not be included in the financial analysis of this report.

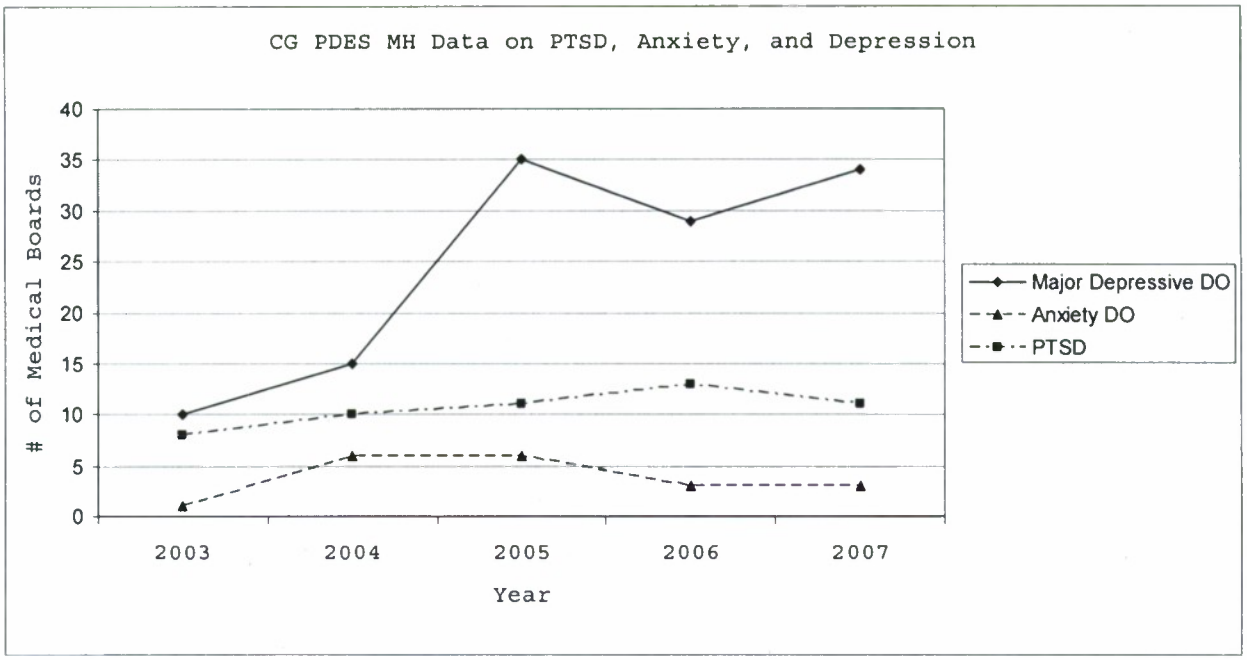

Figure 5. Data on PTSD, Anxiety, and Depression FY03-08.

In summary, between FY2005 and FY2007 the Coast Guard Pacific Area Command has spent in excess of $4.5 million on mental health purchased and direct care costs and an estimated $2.1 million on lost man-hours.

Purpose of the Case

The purpose of this Business Case Analysis (BCA) is to provide the Chief of Health & Safety Maintenance & Logistics Command Pacific with the necessary financial metrics and projections, as well as an assessment of contingencies and risks in consideration of restructuring the mental health program in the Pacific Area. This analysis has the potential to assist in determining whether the Coast Guard Pacific Area Command should

maintain the current processes by which mental health services are obtained, or redefine those processes.

Business Objectives

Business objectives should be focused on improving access and quality of mental health care at the same time attempting to reduce cost of those services. This is a path forward which may allow for effective investment of resources resulting in better outcomes, in a sense getting more "bang for the buck".

Methods and Assumptions

This report provides three management alternatives: (a) Scenario #1: maintain the "status quo"; (b) Scenario #2: establish Manager of Mental Health Services (MMHS) position; and (c) Scenario #3: develop a mental health network throughout the Pacific Area.

Scenario #1

In scenario #1, the Coast Guard Pacific Area Command continues to maintain the "status quo" with regards to obtaining mental health services. According to the National Collation on Healthcare, health care costs are projected to increase at an average rate of 7% per year over the next few years (NCHC, 2009). In FY2005-2007 the Pacific Area Command spent $4.5 million on purchased and direct care, assuming mental health appointment volume for purchased and direct care will remain the same, the Pacific Area Command can expect to see a spending

increase in excess of $9 million over the next five years on purchased and direct care costs due to inflation (see Table 1).

Table 1. PACAREA Purchased/Direct Care Projected Interest Rates.

FY	Purchased Care	7% inflation	Direct Care (x .9314 CMAC)	7% Inflation	Totals
FY07	$1,106,414.02	$77,448.98	$674,169.92	$47,191.89	
FY08	$1,183,863.00	$82,870.41	$721,361.81	$50,495.33	$1,905,224.82
FY09	$1,266,733.41	$88,671.34	$771,857.14	$54,030.00	$2,038,590.55
FY10	$1,355,404.75	$94,878.33	$825,887.14	$57,812.10	$2,181,291.89
FY11	$1,450,283.08	$101,519.82	$883,699.24	$61,858.95	$2,333,982.32
FY12	$1,551,802.90	$108,626.20	$945,558.19	$66,189.07	$2,497,361.09
FY13	$1,660,429.10	$116,230.04	$1,011,747.26	$70,822.31	$2,672,176.36
Totals	$8,468,516.25	$343,869.06	$5,160,110.79	$209,529.32	$13,628,627.03

Scenario #2

Scenario #2 incorporates the hiring of two psychiatrists to fill the role as Manager of Mental Heath Services (MMHS) for their specific districts. One would be located at the Coast Guard District-11 office in Alameda, CA and also be responsible for District-14 Hawaii. The other would be located at the District-13 office in Seattle, WA and also be responsible for District-17 Alaska. The Manager of Mental Health Services (MMHS) primary duties and responsibilities would include: (a) facilitating coordination of Coast Guard mental health resources in their Districts; (b) providing case management and part-time direct care at the local Coast Guard clinics; (c) liaison with DoD and TRICARE Network mental health providers to cultivate an understanding of Coast Guard needs; and (d) providing oversight of all mental health medical boards within their Districts.

Scenario #3

Scenario #3 incorporates the Manager of Mental Health Services (MMHS) in scenario #2 with four Full-Time-Equivalent (FTE) contract psychologists with the intent of recapturing mental health referrals by providing direct care at specified Coast Guard clinics.

Between FY2005 and FY2007 the Coast Guard had 9919 mental health initial encounters and follow-up appointments sent out for purchased (6124) and direct (3795) care (M2, 2008). Analysis of M2 data reveals the highest volume of mental health referrals in the Pacific Area are from Coast Guard clinics in Alameda, CA; Petaluma, CA; Kodiak, AK; and Seattle, WA (see Figure 6, only the top ten clinics out of the 15 in the Pacific Area are displayed).

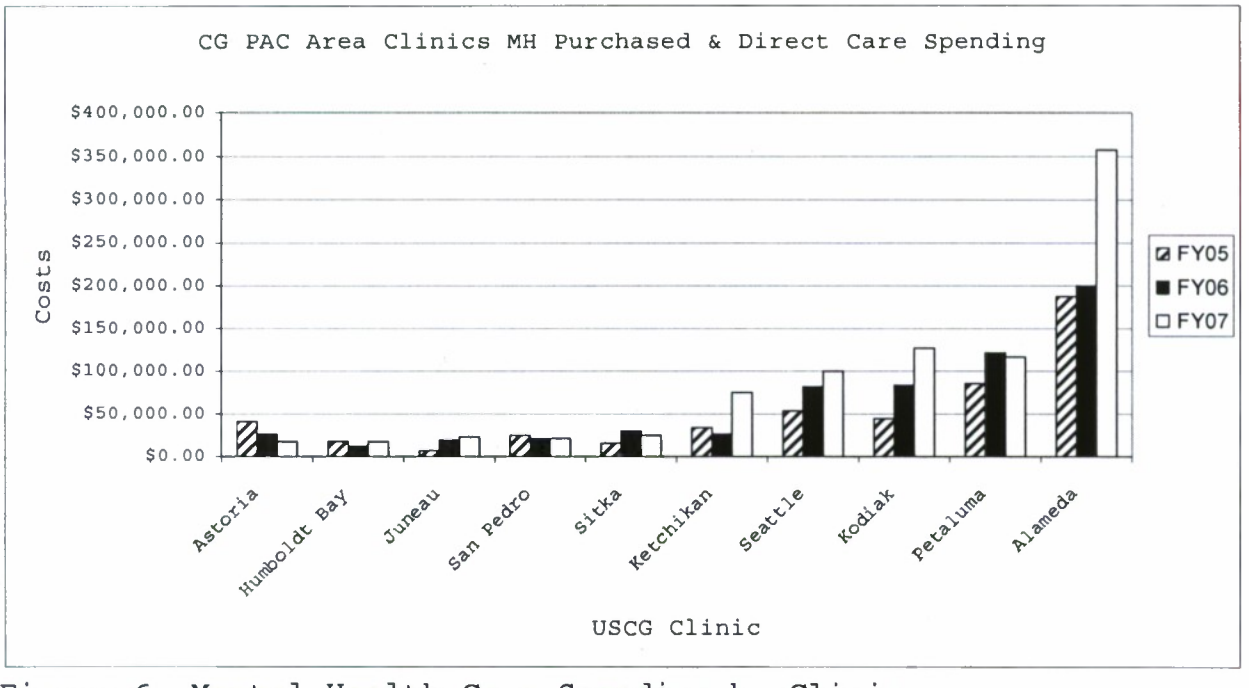

Figure 6. Mental Health Care Spending by Clinic.

It is impractical to assume the Coast Guard can recapture all mental health referrals throughout the Pacific Area. However, by placing Full-Time-Equivalent (FTE) contract psychologists at the four Coast Guard clinics with the highest volume of mental health referrals, assisted by the Manager of Mental Health Services (MMHS) discussed in scenario #2, a goal of recapturing 50% of mental health referrals may be obtained.

The primary duty and responsibility of the four contract psychologists would be to provide mental and behavioral health care to Coast Guard beneficiaries in their specific area of responsibility (AOR). In addition, the contract psychologists would provide pre and post deployment briefings to Coast Guard units and mental health training to line Commanders and Coast Guard Health Services personnel to remove the stigma associated with mental and behavioral health illnesses. In a study conducted by the U.S. Army on Division Mental Health in the New Brigade Combat Team Structure, it was determined Pre deployment education and communication probably eliminated some problems during deployment, and communication among mental health providers and command units during deployment resolved most problems encountered (Warner, 2007).

Scope of the Case

Time

This BCA will cover a period of five years, beginning 1 October 2010. The analysis examines cash flows over the same five year period.

Organizations

The organizations considered in this analysis are: (a) Integrated Support Command (ISC) Alameda, CA clinic; (b) USCG Training Center Petaluma, CA clinic; (c) ISC Seattle, WA clinic; (d) ISC Kodiak, AK clinic; (e) Coast Guard District 11; and (f) Coast Guard District 13.

Major Assumptions

This BCA has the following assumptions:

- Availability of contract staff.
- Active duty and reserve Pacific Area populations will remain the same.
- Mental health referrals will remain at current levels.
- Average length of mental health appointment is four hours.
- Facilities have the required space and equipment.
- Ancillary services will not be adversely affected.
- IT/IM technology would be purchased with non-medical funding.

- Scenario #2 will recapture 20% of mental health visits currently being referred out for purchased or direct care.
- Scenario #3 will recapture 50% of mental health visits currently being referred out for purchased or direct care.
- Medical labor costs and benefits will increase at 7% inflationary rate (CMS, 2008).
- All costs related to personnel certification, licensure, training, and required continuing education are contained in labor costs.

Business Impacts

Cost

Scenario #1

Maintaining the "status quo" with regards to mental health services would cost the Coast Guard Pacific Area Command nothing in terms of annual payouts for contract staff. However, by not implementing some form of restructuring, the cost, over the next five years, due to health care inflation will exceed $9 million (see table 1.)

Scenario #2

Utilizing current salaries provided by salary.com for a psychiatrist in Alameda, CA and Seattle, WA it can be estimated the average annual salary of a psychiatrist would be

$230,000/year. The total cost of two contract psychiatrists would be estimated at $460,000/year (see Table 2).

Table 2. Scenario #2 Projected Costs.

Facilities	Space available at CG Clinics		$0
Equipment/Supplies	Available at CG Clinics		$0
Hardware	Computers available from IM/IT		$0
Personnel Expenses	Contract Psychiatrist	2	$230,000 x 2 = $460,000
Total Expenses	Personnel and supplies		$460,000

Scenario #3

Utilizing current salaries provided by salary.com for a psychologist in Alameda, CA; Petaluma, CA; Seattle, WA; and Kodiak, AK it can be estimated the average annual salary of a psychologist would be $97,000/year. The total cost of four contract psychologists would be approximated at $388,000/year. Added to the cost of two psychiatrists ($460,000) in scenario two, the total cost estimate for scenario #3 would be $848,000/year (see Table 3).

Table 3. Scenario #3 Projected Costs.

Facilities	Space available at CG Clinics		$0
Equipment/Supplies	Available at CG Clinics		$0
Hardware	Computers available from IM/IT		$0
Personnel Expenses	Contract Psychiatrist	2	$230,000 x 2 = $460,000
	Contract LCSW	4	$97,000 x 4 = $388,000
Total Expenses	Personnel and supplies		$848,000

Benefits

Scenario #1

No benefits associated.

Scenario #2

The projected "hard" benefit could be a potential 20% recapture of mental health referrals back into Coast Guard clinics and the associated cost savings in purchased and direct care, travel, and lost man-hours. The projected "soft" benefits could include: (a) improved coordination of mental health resources, (b) enhanced feedback to line Commanders, (c) streamlined mental health medical board process, (d) improved case management, (e) pre and post deployment briefs to operational commands, and (f) education and training of Coast Guard personnel to remove the stigma associated with mental health illnesses.

Scenario #3

The projected "hard" benefits could be a potential 50% recapture of mental health referrals back into Coast Guard clinics and the associated cost savings in purchased and direct care, travel, and lost man-hours. The projected "soft" benefits could include: (a) improved coordination of mental health resources, (b) enhanced feedback to line Commanders, (c) streamlined mental health medical board process, (d) improved case management, (e) pre and post deployment briefs to

operational commands, and (f) education and training of Coast Guard personnel to remove the stigma associated with mental health illnesses. The key difference between scenario #2 and scenario #3 is the ability to recapture a higher volume of mental health patients thus achieving greater cost savings. Furthermore, the ability to have a greater impact on the "soft" benefits is demonstrated in scenario #3.

Financial Metrics

The financial metrics used in this analysis include annual and cumulative cash flows, net present value (NPV) and internal rate of return (IRR).

Cash Flow Analysis

Scenario #2

Assuming the two contract psychiatrists will be able to recapture 20% of the mental health appointments currently being referred out for purchased and direct care, the Pacific Area Command would see an average annual cost of $2,398,017 between FY10-FY14 (See Table 4). When compared to scenario #1 cost, scenario #2 demonstrates an average annual cost savings of $447,420 (See table 5).

Table 4. Scenario #2 20% Recapture Cash Flow Analysis

ANNUAL BENEFITS	FY09	FY10	FY11	FY12	FY13	FY14
Facility/MTF Savings/Revenue	$0	$0	$0	$0	$0	$0
Purchased Care Savings	$253,347	$271,081	$290,057	$310,360	$332,086	$355,332
Direct Care Savings	$154,371	$165,177	$176,740	$189,112	$202,349	$216,514
Other Non-Specified Savings	$0	$0	$0	$0	$0	$0
Cost Avoidance	$0	$0	$0	$0	$0	$0
Total Benefit/Savings	$407,718	$436,258	$466,796	$499,472	$534,435	$571,846
COST						
OPERATING EXPENSE ITEMS						
Personnel - Contract Psychiatrist x 2	$460,000	$492,200	$526,654	$563,520	$602,966	$645,174
80% Purchased/Direct Care	$1,630,872	$1,745,033	$1,867,185	$1,947,888	$2,137,741	$2,287,382
Non-Capital Lease/Rental/Maintenance	$0	$0	$0	$0	$0	$0
Supplies	$0	$0	$0	$0	$0	$0
Other	$0	$0	$0	$0	$0	$0
CAPITAL ASSETS PURCHASED						
Equipment (Lease & Purchase)	$0	$0	$0	$0	$0	$0
Facilities	$0	$0	$0	$0	$0	$0
Total Cost	$2,090,872	$2,237,233	$2,393,839	$2,511,408	$2,740,707	$2,932,556
Net Yearly Cash Flow	($1,683,154)	($1,800,975)	($1,927,043)	($2,011,936)	($2,206,272)	($2,360,710)

Table 5. Cost Comparison of Scenarios #1 and #2

	FY09	FY10	FY11	FY12	FY13	FY14
Scenario #1 Projected Costs	$2,038,590	$2,181,291	$2,333,982	$2,497,361	$2,672,176	$2,859,228
Scenario #2 Projected Costs	$1,683,154	$1,800,975	$1,927,043	$2,011,936	$2,206,272	$2,360,710
Projected Savings	$355,436	$380,316	$406,939	$485,425	$465,904	$498,518

Scenario #3

Assuming the combination of four Full-Time-Equivalent contract psychologists in combination with two contract psychiatrists can recapture 50% of the mental health appointments currently being referred out for purchased and direct care, the Pacific Area Command would see an average annual cost of $1,043,598 between FY10-FY14 (See Table 6). When

compared to scenario #1 cost, scenario #3 demonstrates an average annual cost savings of $1,465,209 (See table 7).

Table 6. Scenario #3 50% Recapture Cash Flow Analysis

ANNUAL BENEFITS	FY09	FY10	FY11	FY12	FY13	FY14
Facility/MTF Savings/Revenue	$0	$0	$0	$0	$0	$0
Purchased Care Savings	$633,367	$677,702	$725,141	$775,901	$830,214	$888,330
Direct Care Savings	$385,928	$412,943	$441,849	$472,778	$505,873	$541,285
Other Non-Specified Savings	$0	$0	$0	$0	$0	$0
Cost Avoidance	$0	$0	$0	$0	$0	$0
Total Benefit/Savings	$1,019,295	$1,090,645	$1,166,990	$1,248,680	$1,336,087	$1,429,614
COST						
OPERATING EXPENSE ITEMS						
Personnel - Contract Psychiatrist x 2	$460,000	$492,200	$526,654	$563,520	$602,966	$645,174
Personnel - Contract Psychologist x 4	$388,000	$415,160	$444,221	$475,317	$508,589	$544,190
50% Purchased/Direct Care	$1,019,295	$1,090,645	$1,166,991	$1,248,680	$1,336,088	$1,429,614
Non-Capital Lease/Rental/Maintenance	$0	$0	$0	$0	$0	$0
Supplies	$0	$0	$0	$0	$0	$0
Other	$0	$0	$0	$0	$0	$0
CAPITAL ASSETS PURCHASED						
Equipment (Lease & Purchase)	$0	$0	$0	$0	$0	$0
Facilities	$0	$0	$0	$0	$0	$0
Total Cost	$1,867,295	$1,998,005	$2,137,866	$2,287,516	$2,447,643	$2,618,978
Net Yearly Cash Flow	($848,001)	($907,360)	($970,876)	($1,038,837)	($1,111,556)	($1,189,364)

Table 7. Cost Comparison of Scenarios #1 and #3

	FY09	FY10	FY11	FY12	FY13	FY14
Scenario #1 Projected Costs	$2,038,590	$2,181,291	$2,333,982	$2,497,361	$2,672,176	$2,859,228
Scenario #3 Projected Costs	$848,001	$907,360	$970,876	$1,038,837	$1,111,556	$1,189,364
Projected Savings	$1,190,589	$1,273,931	$1,363,106	$1,458,524	$1,560,620	$1,669,864

Net Present Value (NPV) and Internal Rate of Return (IRR)

Net present value (NPV) analysis is a useful way to analyze alternative methods of capital financing. In a comparison of two alternative financing packages, the one with the highest NPV should be selected (Cleverley & Cameron, 2007). Internal rate of

return (IRR) is the rate of growth a project is expected to generate. A project with a substantially higher IRR value than other available options would still provide a much better chance of strong growth (Investopedia.com, 2009). A real discount rate of 2.3 percent is used for discounting constant-dollar flows, as is often required in cost-effectiveness analysis (OMB, 2008).

When comparing the NPV and IRR of scenarios #2 and #3, scenario #2 shows a negative NPV of $729,375 over the five year period and a negative 7% rate of return. Scenario #3 shows a positive NPV of $1,571,337 over the five year period and a 12% rate of return (See table 8).

Table 8. NPV/IRR Comparison of Scenarios #2 and #3

	Rate	Total cost	Return 1	Return 2	Return 3	Return 4	Return 5
Scenario #2	0.023	($2,830,514)	$380,316	$406,939	$485,425	$465,904	$498,518
Scenario #3	0.023	($5,217,991)	$1,273,931	$1,363,106	$1,458,524	$1,560,620	$1,669,864

	NPV	IRR
Scenario #2	($729,375)	-7%
Scenario #3	$1,571,337	12%

Sensitivities, Risks, and Contingencies

The upper and lower estimated limits for recaptured revenues and expenses are analyzed to determine the risk of each scenario. Calculations with a 10% increase and 10% decrease in revenues and expenses to determine the best and worst case scenarios were utilized. This 10% figure was suggested by the Chief of Health and Safety Maintenance & Logistics Command

Pacific. Considered were the variances between projected expenditures and revenues to establish the sensitivity analysis; based on the major assumption that no additional equipment or facility modification expenses are required to begin mental health services. The main costs considered are associated with personnel salary and benefits and referral care expenses.

Scenario #2

Assuming the two contract psychiatrists will be able to recapture 10% of the mental health appointments currently being referred out for purchased and direct care, the Pacific Area Command would see an average annual cost of $2,573,148 between FY10-FY14 (See Table 9). When compared to scenario #1 cost, scenario #2 demonstrates an average annual cost of $64,341 in excess of the cost associated with scenario #1 between FY10-FY14 (See table 10).

Table 9. Scenario #2 10% Recapture Cash Flow Analysis

ANNUAL BENEFITS	FY09	FY10	FY11	FY12	FY13	FY14
Facility/MTF Savings/Revenue	$0	$0	$0	$0	$0	0
Purchased Care Savings	$126,673	$135,540	$145,028	$155,180	$166,043	177,666
Direct Care Savings	$77,186	$82,589	$88,370	$94,556	$101,175	108,257
Other Non-Specified Savings	$0	$0	$0	$0	$0	0
Cost Avoidance	$0	$0	$0	$0	$0	0
Total Benefit/Savings	$203,859	$218,129	$233,398	$249,736	$267,218	285,923
COST						
OPERATING EXPENSE ITEMS						
Personnel - Contract Psychiatrist x 2	$460,000	$492,200	$526,654	$563,520	$602,966	645,174
90% Purchased/Direct Care	$1,834,731	$1,963,162	$2,100,584	$2,247,624	$2,404,958	2,573,305
Non-Capital Lease/Rental/Maintenance	$0	$0	$0	$0	$0	0
Supplies	$0	$0	$0	$0	$0	0
Other	$0	$0	$0	$0	$0	0
CAPITAL ASSETS PURCHASED						
Equipment (Lease & Purchase)	$0	$0	$0	$0	$0	0
Facilities	$0	$0	$0	$0	$0	0
Total Cost	$2,294,731	$2,455,362	$2,627,238	$2,811,144	$3,007,924	3,218,479
Net Yearly Cash Flow	($2,090,872)	($2,237,233)	($2,393,840)	($2,561,408)	($2,740,707)	(2,932,556)

Table 10. Cost Comparison of Scenarios #1 and #2 (10% recapture)

	FY09	FY10	FY11	FY12	FY13	FY14
Scenario #1 Projected Cost	$2,038,590	$2,181,291	$2,333,982	$2,497,361	$2,672,176	$2,859,228
Scenario #2 10% Recapture Cost	$2,090,872	$2,237,233	$2,393,840	$2,561,408	$2,740,707	$2,932,556
Projected Savings	($52,282)	($55,942)	($59,858)	($64,047)	($68,531)	($73,328)

Assuming the two contract psychiatrists will be able to recapture 30% of the mental health appointments currently being referred out for purchased and direct care, the Pacific Area Command would see an average annual cost of $1,569,625 between FY10-FY14 (See Table 11). When compared to scenario #1 cost, scenario #2 demonstrates an average annual cost savings of

$939,182 between FY10-FY14 (See table 12).

Table 11. Scenario #2 30% Recapture Cash Flow Analysis

ANNUAL BENEFITS	FY09	FY10	FY11	FY12	FY13	FY14
Facility/MTF Savings/Revenue	$0	$0	$0	$0	$0	0
Purchased Care Savings	$380,020	$406,621	$435,085	$465,541	$498,129	532,998
Direct Care Savings	$231,557	$247,766	$265,110	$283,667	$303,524	324,771
Other Non-Specified Savings	$0	$0	$0	$0	$0	0
Cost Avoidance	$0	$0	$0	$0	$0	0
Total Benefit/Savings	$611,577	$654,387	$700,195	$749,208	$801,653	857,768
COST						
OPERATING EXPENSE ITEMS						
Personnel - Contract Psychiatrist x 2	$460,000	$492,200	$526,654	$563,520	$602,966	645,174
70% Purchased/Direct Care	$1,427,013	$1,526,904	$1,633,787	$1,748,152	$1,870,523	2,001,460
Non-Capital Lease/Rental/Maintenance	$0	$0	$0	$0	$0	0
Supplies	$0	$0	$0	$0	$0	0
Other	$0	$0	$0	$0	$0	0
CAPITAL ASSETS PURCHASED						
Equipment (Lease & Purchase)	$0	$0	$0	$0	$0	0
Facilities	$0	$0	$0	$0	$0	0
Total Cost	$1,887,013	$2,019,104	$2,160,441	$2,311,672	$2,473,489	2,646,634
Net Yearly Cash Flow	($1,275,436)	($1,364,717)	($1,460,246)	($1,562,464)	($1,671,836)	(1,788,865)

Table 12. Cost Comparison of Scenarios #1 and #2 (30% Recapture)

	FY09	FY10	FY11	FY12	FY13	FY14
Scenario #1 Projected Cost	$2,038,590	$2,181,291	$2,333,982	$2,497,361	$2,672,176	$2,859,228
Scenario #2 30% Recapture Cost	$1,275,436	$1,364,717	$1,460,246	$1,562,464	$1,671,836	$1,788,865
Projected Savings	$763,154	$816,574	$873,736	$934,897	$1,000,340	$1,070,363

Scenario #3

Assuming the combination of the four Full-Time-Equivalent contract psychologists in conjunction with the two contract psychiatrists can recapture 40% of the mental health appointments currently being referred out for purchased and direct care, the Pacific Area Command would see an average

annual cost of $1,545,359 between FY10-FY14 (see Table 13). When compared to scenario #1 cost, scenario #3 demonstrates an average annual cost savings of $963,448 between FY10-FY14 (See table 14).

Table 13. Scenario #3 40% Recapture Cash Flow Analysis.

ANNUAL BENEFITS	FY09	FY10	FY11	FY12	FY13	FY14
Facility/MTF Savings/Revenue	$0	$0	$0	$0	$0	$0
Purchased Care Savings	$506,693	$542,162	$580,113	$620,721	$664,171	$710,664
Direct Care Savings	$308,743	$330,355	$353,480	$378,223	$404,699	$433,028
Other Non-Specified Savings	$0	$0	$0	$0	$0	$0
Cost Avoidance	$0	$0	$0	$0	$0	$0
Total Benefit/Savings	$815,436	$872,517	$933,593	$998,944	$1,068,870	$1,143,691
COST						
OPERATING EXPENSE ITEMS						
Personnel - Contract Psychiatrist x 2	$460,000	$492,200	$526,654	$563,520	$602,966	$645,174
Personnel - Contract Psychologist x 4	$388,000	$415,160	$444,221	$475,317	$508,589	$544,190
60% Purchased/Direct Care	$1,223,154	$1,308,775	$1,400,389	$1,498,416	$1,603,305	$1,715,537
Non-Capital Lease/Rental/Maintenance	$0	$0	$0	$0	$0	$0
Supplies	$0	$0	$0	$0	$0	$0
Other	$0	$0	$0	$0	$0	$0
CAPITAL ASSETS PURCHASED						
Equipment (Lease & Purchase)	$0	$0	$0	$0	$0	$0
Facilities	$0	$0	$0	$0	$0	$0
Total Cost	$2,071,154	$2,216,135	$2,371,264	$2,537,252	$2,714,860	$2,904,901
Net Yearly Cash Flow	($1,255,718)	($1,343,618)	($1,437,672)	($1,538,308)	($1,645,990)	($1,761,210)

Table 14. Cost Comparison of Scenarios #1 and #3 (40% Recapture)

	FY09	FY10	FY11	FY12	FY13	FY14
Scenario #1 Projected Cost	$2,038,590	$2,181,291	$2,333,982	$2,497,361	$2,672,176	$2,859,228
Scenario #3 40% Recapture Cost	$1,255,718	$1,343,618	$1,437,672	$1,538,308	$1,645,990	$1,761,210
Projected Savings	$782,872	$837,673	$896,310	$959,053	$1,026,186	$1,098,018

Assuming the combination of the four Full-Time-Equivalent contract psychologists in conjunction with the two contract

psychiatrists recapture 60% of the mental health appointments currently being referred out for purchased and direct care, the Pacific Area Command would see an average annual cost of $541,836 between FY10-FY14 (see Table 15). When compared to scenario #1 cost, scenario #3 demonstrates an average annual cost savings of $1,966,971 between FY10-FY14 (See Table 16).

Table 15. Scenario #3 60% Recapture Cash Flow Analysis.

ANNUAL BENEFITS	FY09	FY10	FY11	FY12	FY13	FY14
Facility/MTF Savings/Revenue	$0	$0	$0	$0	$0	$0
Purchased Care Savings	$760,040	$813,243	$870,170	$931,081	$996,257	$1,065,995
Direct Care Savings	$463,114	$495,532	$530,219	$567,335	$607,048	$649,541
Other Non-Specified Savings	$0	$0	$0	$0	$0	$0
Cost Avoidance	$0	$0	$0	$0	$0	$0
Total Benefit/Savings	$1,223,154	$1,308,775	$1,400,389	$1,498,416	$1,603,305	$1,715,537
COST						
OPERATING EXPENSE ITEMS						
Personnel - Contract Psychiatrist x 2	$460,000	$492,200	$526,654	$563,520	$602,966	$645,174
Personnel - Contract Psychologist x 4	$388,000	$415,160	$444,221	$475,317	$508,589	$544,190
40% Purchased/Direct Care	$815,436	$872,516	$933,592	$998,944	$1,068,870	$1,143,691
Non-Capital Lease/Rental/Maintenance	$0	$0	$0	$0	$0	$0
Supplies	$0	$0	$0	$0	$0	$0
Other	$0	$0	$0	$0	$0	$0
CAPITAL ASSETS PURCHASED						
Equipment (Lease & Purchase)	$0	$0	$0	$0	$0	$0
Facilities	$0	$0	$0	$0	$0	$0
Total Cost	$1,663,436	$1,779,876	$1,904,467	$2,037,780	$2,180,425	$2,333,055
Net Yearly Cash Flow	($440,282)	($471,101)	($504,078)	($539,364)	($577,120)	($617,518)

Table 16. Cost Comparison of Scenarios #1 and #3 (60% Recapture)

	FY09	FY10	FY11	FY12	FY13	FY14
Scenario #1 Projected Costs	$2,038,590	$2,181,291	$2,333,982	$2,497,361	$2,672,176	$2,859,228
Scenario #3 60% Recapture	$440,282	$471,101	$504,078	$539,364	$577,120	$617,518
Projected Savings	$1,598,308	$1,710,190	$1,829,904	$1,957,997	$2,095,056	$2,241,710

Recommendations and Conclusions

Based upon analysis presented in this report, it is recommended scenario #3, establishment of a mental health network (two psychiatrists and four psychologists), be implemented by Coast Guard Maintenance & Logistics Command Pacific Area Health & Safety Division. Scenario #3 will provide the greatest benefit to Coast Guard Pacific Area beneficiaries while minimizing risks and maximizing returns. Compared to scenario #1, maintaining the "status quo", scenario #3 demonstrates an average annual cost savings of $1,465,209 by recapturing 50% of the purchased and direct care mental health referrals back into Coast Guard clinics. Net present value (NPV) and internal rate of return (IRR) analysis over the five year period demonstrates a positive NPV of $1,571,337 and a 12% rate of return on investment. Furthermore, ancillary costs associated with travel and lost man-hours would markedly be decreased.

In addition to the considerable cost savings, scenario #3 would significantly improve access and quality of mental health services by allowing for more versatility among mental health providers in providing the "soft" benefits of: (a) improved coordination of mental health resources, (b) enhanced feedback to line Commanders, (c) streamlined mental health medical board process, (d) improved case management, (e) pre and post deployment briefs to operational commands, and (f) education and

training of Coast Guard personnel to remove the stigma associated with mental health illnesses.

Scenario #1, maintain the "status quo", would cost the Coast Guard Pacific Command nothing in terms of "out-of-pocket" expense for contract mental health providers; however, projected inflationary increases in purchased and direct care costs will exceed $9 million over the next five years. These inflationary costs demonstrate the need for restructuring the current processes in obtaining mental health services in the Pacific Area.

Scenario #2, establishment of a Manager of Mental Health Services (MMHS) position (two psychiatrists), has a lower "out-of-pocket" cost compared to scenario #3 but would significantly limit the number of patients the Pacific Area Command would be able to recapture, thus minimizing returns. Although cash flow analysis shows a cost savings of $447,420 per year when compared to scenario #1, net present value (NPV) and internal rate of return (IRR) analysis demonstrates a negative NPV of $946,279 and a negative 7% rate of return over the five year period. As well, 80% of the mental health referrals would continue to be referred out for purchased and direct care, only slightly improving access and quality. Finally, having only two mental health providers in the Pacific Area would significantly limit the ability to enhance the associated "soft" benefits mentioned

previously. For these reasons it is recommended that scenario #2 not be considered.

It is suggested Maintenance and Logistics Command Pacific put into action scenario #3 beginning October 1, FY2010; providing ample time for program implementation. A final recommendation would be the assignment of a "Transition Manager" from the current pool of Coast Guard Medical Administration Chief Warrant Officers or Lieutenants whose responsibilities would include: (a) hiring of contract personnel; (b) drafting of Standard Operating Procedures (SOP); (c) ensuring implementation timelines are adhered too; (d) collecting, developing, and analyzing financial metrics and drafting quarterly reports; (e) ensuring mental health providers are conducting requisite pre and post deployment briefs and training; and (f) assisting clinic administrators with any issues that may arise with regards to the mental health program initiative.

Other recommendations provided by operational Commanders and Work-Life personnel include: (a) a standard Coast Guard mental health referral form that contains guidance to DoD and Network providers outlining Coast Guard needs and requirements (CAPT C.B. Lloyd, Commanding Officer USCGC MUNRO, personal communication, December 18, 2008); (b) improved screening process at Coast Guard Training Center (TRACEN) Cape May, NJ to identify recruits with potential mental health concerns before

being sent to the fleet (CDR C.M. Ash, Executive Officer USCGC MORGENTHAU, personal communication, January 28, 2008); and (c) a one-page "release of information" form that the client, patient, and penitent would sign to streamline the referral process among the different mental health resources and help establish open lines of communication among those resources (LCDR R.A. Church, Chaplain TRACEN Petaluma, personal communication, January 26, 2009).

With the development of a Coast Guard mental health network in the Pacific Area, a substantial improvement in the accessibility and quality of mental health services would be realized; while, simultaneously, decreasing overall costs. In addition, operational readiness of Coast Guard units in the Pacific Area would be enhanced by improved communications between line Commanders, Coast Guard primary care managers (PCM), DoD and TRICARE Network providers, and the variety of Coast Guard mental health resources; ultimately improving the resolution of Fitness-For-Duty issues and streamlining the mental health medical board process. Most importantly, the Coast Guard member will have a much improved avenue in which to seek mental health services.

References

Berry-Caban, C.S. (2008).Soldiers' experience with medical hold: The case of Fort Bragg. *Military Medicine. 173,* 349.

Centers for MEDICAID and MEDICARE Services (CMS), (2009). *National Health Expediture data*. Retrieved January 9, 2009 from: http://HHS.gov

Cleverley, W.O. & Cameron, A.E. (2007). *Essentials of health care finance*. Mississauga, Ontario. Jones and Bartlett.

Commandant Instruction (COMDTINST) M1850.2D, (2006). *Physical Disability Evaluation System Manual*. Washington, DC: U. S. Coast Guard Department of Homeland Security.

Commandant Instruction (COMDTINST) M6000.1C, (2008). *Medical Manual*. Washington, DC: U.S. Coast Guard Department of Homeland Security.

Commandant Instruction (COMDTINST) 7310.1L, (2008). *Coast Guard Reimbursable Standard Rates*. Washington, DC: U.S. Coast Guard Department of Homeland Security.

Coughlin, K.A., 2007. A Policy Analysis of the Coast Guard's Existing Patient Satisfaction System and Recommendations for Improvement. Unpublished manuscript, Army-Baylor University.

Department of Defense Health Affairs. (2007). *TRICARE Prime access standards for mental health care* (HA Policy: 07-022). Washington, DC: Department of Defense.

Department of Defense task Force on Mental Health. (2007). *An achievable vision: Report of the Department of Defense Task Force on Mental Health*. Falls Church, VA: Defense health Board.

Investopedia.com (2009). *Internal rate of return*. Retrieved February 24, 2009 from http://www.investopedia.com/terms/i/irr.asp

Military Health System (MHS)-Management Analysis and Reporting Tool (M2), (2008). Retrieved December 12, 2008.

National Archives and Records Administration (NARA). (1994). *The Federal Register* ((FR)). Washington, DC: Office of the Federal Register.

National Collation on Health Care (NCHC), (2009). *Health Insurance Costs*. Retrieved January 9, 2009 from: http://www.nchc.org/facts/cost.shtml

Office of Management and Budget (OMB), (2008). Appendex C. retrieved March 10, 2009 from: http://www.whitehouse.Gov/omb/circulars/a094/a094.html

Shi, L., & Singh, D.A. (2004). *Delivering health care in america: A systems approach*. Sudbury, MA: Jones and Barlett.

U.S. Coast Guard, (2008). Missions. Retrieved November 6, 2008, From: http://www.uscg.mil/top/missions/

U.S. Coast Guard (2008). MLCPAC Health and Safety Division. Retrieved November 5, 2008, from: http://www.uscg.mil/mlcpac/kDiv/default.asp

U.S. Coast Guard, (2008). U.S. Coast Guard Pacific Area Overview. Retrieved February 04, 2009, from: http://www.uscg.mil/pacarea/overview.asp

U.S. Department of Homeland Security (DHS), (2007). Commandant, U.S.Coast Guard: Admiral Thad W. Allen. Retrieved February 04, 2009, from http://www.dhs.gov/xabout/structure/biography_0157.shtm

U.S. Government Accountability Office (GAO), (2007). Military Health Care: TRICARE Cost-Sharing Proposals Would Help Offset Increasing Health Care Spending, but Projected Savings are Likely Overestimated. Retrieved February 04, 2009, from http://www.gao.gov/new.items/d07647.pdf

Warner, C.H. (2007).Division mental health in the new brigade combat team structure: part I. predeployment and deployment. *Military Medicine, 172,* 907.

Westphal, R.J. (2007). Fleet leaders' attitude about subordinates' use of mental health services. *Military Medicine, 172,* 1138.